ABSTRACT OF THE DISCLOSURE

An Exhaust Gas Recirculation (EGR) system for an internal combustion engine is provided. The EGR system utilizes a turbocharger having a compressor with more than one stage. The first stage of the compressor boosts the intake air to an intermediate pressure below the pressure at the intake manifold of the engine. The recirculated exhaust gas is maintained at approximately this intermediate pressure, thus providing a lower back pressure on the exhaust manifold of the engine, thereby improving fuel efficiency. The exhaust gas and intake air are mixed and subsequently boosted by a second stage of the compressor to a pressure required to supply the demanded mass flow to the engine.